

CLAIMS

What is claimed is:

- 5 1. A method for updating contents of a first memory of a computer system, said method comprising the steps of:
 - a) receiving new information for said first memory from an external source, said first memory for storing information that is required during startup of said computer system;
 - 10 b) storing said new information in a nonvolatile second memory of said computer system;
 - c) restarting said computer system without relying on said new information;
 - d) verifying said new information stored in said second memory to ensure that it is safe to load said new information into said first memory; and
 - 15 e) responsive to said verifying, loading said new information from said second memory into said first memory wherein said new information can be used for a subsequent startup of said computer system.
- 20 2. The method as recited in Claim 1 further comprising the step of copying existing information in said first memory to said second memory such that said existing information can be restored into said first memory should said first memory become corrupted.
- 25 3. The method as recited in Claim 1 wherein said step d) comprises the step of checking a version date of said new information in said second memory to ensure that said new information is suitable for said first memory.

4. The method as recited in Claim 1 wherein said step d) comprises the step of performing a checksum test of said new information in said second memory to ensure that said new information is free from corruption.

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5. The method as recited in Claim 1 wherein said step d) comprises the step of checking a power level of said computer system to ensure that said step e) can be completed without a power failure.

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6. The method as recited in Claim 1 wherein said first memory comprises a flash read-only memory (ROM).

7. The method as recited in Claim 1 wherein said new information comprises boot ROM code.

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8. The method as recited in Claim 1 wherein said new information comprises operating system (OS) code.

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9. The method as recited in Claim 1 wherein said first memory has no information stored therein initially.

10. The method as recited in Claim 1 wherein said second memory comprises a random-access memory (RAM).

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11. The method as recited in Claim 1 wherein said new information is received via wireless communication.

12. The method as recited in Claim 1 wherein said computer system is a personal digital assistant (PDA).

13. The method as recited in Claim 1 wherein said external source is
5 a personal digital assistant (PDA).

14. A computer system comprising:
a processor;
a first memory, coupled to said processor, for storing information that is
10 required during startup of said computer system;
an input output device, coupled to said processor, for receiving new
information intended for said first memory from an external source;
a second memory, coupled to said processor, for storing said new
information, said second memory capable of retaining information stored
15 therein upon a restart of said computer system;
said processor for restarting said computer system without relying on
said new information; said processor further for verifying said new information
stored in said second memory to ensure that it is safe to load said new
information into said first memory; and said processor also for loading said new
20 information from said second memory into said first memory such that said new
information can be used for a subsequent startup of said computer system
provided that said verifying of said new information yields a positive verification
result.
25 15. The computer system as recited in Claim 14 wherein said
processor is further for copying existing information in said first memory to said

second memory such that said existing information can be restored into said first memory should said first memory become corrupted.

16. The computer system as recited in Claim 14 wherein said
5 processor is also for checking a version date of said new information in said second memory to ensure that said new information is suitable for said first memory.

17. The computer system as recited in Claim 14 wherein said
10 processor is also for performing a checksum test of said new information in said second memory to ensure that said new information is free from corruption.

18. The computer system as recited in Claim 14 wherein said
processor is also for checking a power level of said computer system to ensure
15 that said loading of said new information from said first memory into said second memory can be completed without a power failure.

19. The computer system as recited in Claim 14 wherein said first
memory comprises a flash read-only memory (ROM).

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20. The computer system as recited in Claim 14 wherein said new
information comprises boot ROM code.

21. The computer system as recited in Claim 14 wherein said new
25 information comprises operating system (OS) code.

22. The computer system as recited in Claim 14 wherein said first memory has no information stored therein initially.

23. The computer system as recited in Claim 14 wherein said second 5 memory comprises a random-access memory (RAM).

24. The computer system as recited in Claim 14 wherein said new information is received via wireless communication.

10 25. The computer system as recited in Claim 14 wherein said computer system is a personal digital assistant (PDA).

26. The computer system as recited in Claim 14 wherein said external source is a personal digital assistant (PDA).

15 27. A method for updating contents of a first memory of a computer system, said method comprising the steps of:

- a) receiving new information intended for said first memory from an external source, said first memory for storing information that is required during 20 startup of said computer system;
- b) storing said new information in a second memory of said computer system, said second memory capable of retaining information stored therein upon a restart of said computer system;
- c) restarting said computer system using said new information in said 25 second memory instead of existing information in said first memory to test said new information;

d) responsive to a positive test result from said step c), loading said new information from said second memory into said first memory such that said new information can be used for a subsequent startup of said computer system; and

5 e) responsive to a negative test result from said step c), restarting said computer system using said existing information in said first memory.

28. The method as recited in Claim 27 wherein said first memory comprises a flash read-only memory (ROM).

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29. The method as recited in Claim 27 wherein said second memory comprises a random-access memory (RAM).

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30. The method as recited in Claim 27 wherein said computer system

is a personal digital assistant (PDA).